PHAR 7288
Hematology and Oncology
Spring Semester 2026

Course Description
This course integrates knowledge of pathophysiology, pharmacology, and pharmacotherapy to make appropriate treatment recommendations for specific hematological and oncological disease processes.

Additional information about the course
Additionally this course reviews cancer biology and the medicinal chemistry and pharmacology of the agents used to treat cancer and used in supportive care. An overview of surgery and radiation therapies used to treat specific cancers is reviewed at a topical level. The course also looks at psychosocial dynamics that can complicate treatment. It is expected that students will be able to seamlessly integrate knowledge attained in previous courses when presented complex problems in this course.

Course Credit
2 credit hours

Pre-requisites / Co-requisites
Successful completion of the P2 year or equivalent.

Class meeting days, time, and location
Didactic- Monday
10:00 am – 11:50 am.
W.T. Brookshire Hall #234

Examination Reviews/Examinations
TBD

Course Coordinator
Bradley J. Brazill, BS Pharm, Pharm.D.
W.T. Brookshire Hall, Office # 243
Phone Number: 903-566-6100
E-mail: bbrazill@uttyler.edu (preferred method of contact)
Office hours: Tuesday and Thursday Noon – 1:00 p.m. or by appointment.

Fisch College of Pharmacy (FCOP) and UT Tyler Policies
This is Part 1 of the syllabus. Part 2 contains UT Tyler and the FCOP policies and procedures. For experiential courses (i.e., IPPE and/or APPE), the Experiential Manual contains additional policies and instructions that supplement the Syllabus Part 1 and 2. Please note, the experiential manual may contain policies with different deadlines and/or instructions. The manual should be followed in these cases.

Required Textbooks
Most course-required materials are available through the Robert R. Muntz Library. These materials are available either online* (http://library.uttyler.edu/) or on reserve. Primary literature, when required will be posted as a PDF on the CANVAS site for this course.

1. Haines ST, Nolin TD, Ellingrod VL, Posey L, Cocohoba J, Holle L. eds. *DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 13th Edition*. McGraw Hill; 2026. Accessed September 29, 2025. https://accesspharmacy.mhmedical.com/content.aspx?bookid=3386&sectionid=282494999
    a. Chapters; 129, 155, 156, 157, 160,162, & 163.

2. Brunton LL, Knollmann BC. eds. *Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 14th Edition*. McGraw-Hill Education; 2023. Accessed September 29, 2025. https://accesspharmacy.mhmedical.com/content.aspx?bookid=3191&sectionid=26670074
    a. Chapters; 69, 70,71, 72, & 73.

Recommended supplemental materials

The course recommended materials are available through the Robert R. Muntz library.

1. Loscalzo J, Fauci AS, Kasper DL, Hauser SL, Longo DL, Jameson J, eds. *Harrison's Principles of Internal Medicine, 21e*. McGraw-Hill, 2022. (Access Pharmacy)

2. Zeind CS, Carvalho MG, Cheng JW, Zaiken TL. *Applied Therapeutic: The Clinical Use of Drugs,* 12th edition, volume 2. Wolters Kluwer, 2023. (LWW Health Library)

3. Katzung BG, Vanderah TW. eds. *Basic & Clinical Pharmacology, 15e*. McGraw Hill; 2021 (Access Pharmacy)

4. Brunton LL, Knollmann BC. eds. *Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 14th Edition*. McGraw-Hill Education; 2023. Accessed September 29, 2025. https://accesspharmacy.mhmedical.com/content.aspx?bookid=3191&sectionid=26670074

Course format

The delivery of the course material is determined by the content expert and may include, but not limited to, the following activities:

1. Lecture
2. Seminar
3. Independent study of selected readings
4. Active learning
5. Case studies
6. Educational videos

CLOs	PLOs (1-12)	ACPE Appendix 1	ACCP Didactic Tool Kit	NAPLEX (1.A.1-5D)	MPJE (1.1-4.7)	Assessment Methods (1-13)
1. Select appropriate medication therapy for treatment of specific cancers and supportive care based on principles of cancer biology, physiology, pathophysiology and pharmacology.	1,2,5,11	7, 15, 16, 28, 33, 34, 35	Anemias Drug-induced hematologic disorders Coagulation disorders Platelet disorders Infections in immunocompromised patients Pain, neuropathic & nociceptive Breast Cancer Lung Cancer Leukemia Oncologic emergencies Supportive Care Diarrhea Nausea & vomiting, complex Pharmacokinetic and pharmacodynamic considerations	N/A	N/A	1, 2
2. Formulate patient-and disease-specific care plans for pharmacotherapeutic regimens in oncological disorders.	1,2,5,11	7, 15, 16, 28, 33, 34, 35		N/A	N/A	1,2
3. Design monitoring plans for efficacy, toxicity and adverse effects for pharmacotherapeutic regimens in oncologic disorders.	1,2,5,11	7, 15, 16, 28, 33, 34, 35		N/A	N/A	1,2

Course Summative Assessment Methods

Assessment/Examination Method	
1	Question-based examination (Paper and/or Exam Soft) • Multiple choice question. • Fill-in-the -blank • Open ended questions short answer • Open ended essay • Calculations
2	Clinical case submission(s) • Students will be assessed on their ability to analyze patient and disease specific information and use their analysis in the formulation of an individualized patient care plan. The students analysis will be assessed for complexity and completeness.

Grading Policy & Grade Calculation

Grades will be determined based on evaluation of assignments, formative assessments (for learning), and summative assessments (for mastery). For all intents and purposes, final examinations are synonymous with summative assessments. Assessments may consist of, but are not limited to, multiple-choice, true/false, fill in the blank, short-answer, essay, and problem-based questions. They may also include a variety of formats beyond the traditional question-based written examination, as each CLO may require different methods to determine student achievement.

Assignments, formative, and summative assessments may be cumulative. Students are responsible for material presented during prior courses. The grading scale for all graded material is below. The final course grade will be assigned according to the calculated percentage and the percentages will not be rounded upward or downward. For additional information, see Part 2 of the syllabus.

During the time the course is in progress, students who obtain less than 75% on any summative assessment or a total course grade of less than 75% during a particular semester will receive an academic alert from the course coordinator and the Office of Academic Affairs and be subject to weekly in-course remediation with the course instructor(s).

Standard Grade Calculation*	
Individual component	
Readiness Assessment, applications, and/or case submission.	10%
Major Assessments	
Exam 1 (weeks 2-5)	25%
Exam 2 (weeks 6-10 may include topics from weeks 1-4)	25%
Comprehensive Final Exam	40%
Total	100%

The final course letter grade will be determined according to the following grading scheme:	
A	90-100%
B	80-89.999%
C	70-79.999%
D	65-69.999%
F	<65%

Appropriate Use of Artificial Intelligence (AI)
For PHAR 7288, AI is not permitted for any aspect of this course. The work summitted by students in this course will be original material generated by themselves as a individual and/or team assignment. This includes all process work, drafts, brainstorming artifacts, editing, and final products. This extends to group assignments where students must create collaboratively the project. Any instance of the following constitutes a violation of UT Tyler's Honor Code: a student has another person/entity do any portion of a graded assignment, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, using previously submitted assignment and/or using AI tools (such as ChatGPT).

Attendance
To **receive full credit** a student **must attend all class session,** each unapproved absence may result in a 5% reduction in a student's individual component of the course grade. Students can request an excused absence.

Phones
Students are required to have computers and/or tablets which will be used to complete and submit assignments, phones are not required and shall not be used during class time and shall be stored in the students' backpack/bag.

Week (date)	**TOPIC**	**Instructor**	**CLO**
1 (1/12/26)	The Blind Man and the Elephant – *An overview of contemporary cancer treatment*	Brazill	1,3
2 (1/22/26)	Medicinal Chemistry of Select Antineoplastic Agents -for this topic, only class will meet Thursday, January 22, 2026 from 9:00 -11:00 am.	Abdelaziz	1,2
3 (1/26/26)	Essential Cancer Biology Essential Toxicology of Drugs Used to Treat Cancer	Brazill	1,3
4 (2/2/26)	The Approach to the Cancer Patient Essential Supportive Care-I	Brazill	1,3
5 (2/9/26)	Essential Supportive Care-II Essential Oncological Emergencies	Brazill	1,3
6 (2/16/26)	**Examination 1 (weeks 2-5)**	Brazill	1,3
7 (2/23/26)	Essential Review of Hematopoiesis Sickle Cell Anemia	Brazill	1,3
8 (3/2/26)	Leukemias (ALL, AML, CLL, & CML)	Brazill	1,3
	Spring Break March 9-13		
9 (3/16/23)	Lymphoma (Hodgkin's Lymphoma & NHL)	Brazill	1,2,3

10 (3/23/26)	Leukemia &/or Lymphoma Case(s)	Brazill	1,2,3
11 (3/30/26)	**Examination 2 (weeks 6-10)** Integration of knowledge from weeks 2-5 will be essential.	Brazill	1,2,3
12 (4/6/26)	Breast Cancer	Brazill	1,2,3
13 (4/13/26)	Lung Cancer	Brazill	1,2,3
14 (4/20/26)	Breast &/or Lung Cancer Case(s)	Brazill	1,2,3
15 4/27- 5/1	**Final Examinations TBD**		

The course coordinator reserves the right to modify the schedule with only 24-hour notice.